Hampe.—Invitation to authors of treatises of Anatomy and Physiology of Plants; by Dr. H. Mohl.

### Part IV.

On the Genesis of Spiral Vessels; by Dr. Unger.—Monstrosities of certain plants; by Schlechtendal.—Critical revision of *Leptospermeæ* cultivated in Germany; by S. Schauer.—On Mexican plants; by Schlechtendal.

### Part V.

*Abietinæ* of Berlin Gardens; by H. F. Link.—On the different kind of cellular tissue in Algæ; by Dr. Kutzing.—On *Chondrilla stipitata* and *tuberosa*; by C. H. Schultz.—Revision of Anemones; by G. A. Pritzel.—On *Artemisia virens* and *Santonica Linnæi*; by W. de Besser.

### Part VI.

On *Lactuca*; by C. H. Schultz.—On *Ceramium*; by Dr. Kutzing.—On the anatomical structure of *Casuarinæ*; by Dr. Göppert.

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## PROCEEDINGS OF LEARNED SOCIETIES.

### ZOOLOGICAL SOCIETY.

October 12, 1841.—Professor Owen, Vice-President, in the Chair.

A letter from John Parkinson, Esq., was read. In this letter Mr. Parkinson encloses a communication which had been forwarded to him by Mr. Commissary General Coffin, tending to prove the disposition of the woodcock to return, not only to the same district but to a once-frequented spot. The communication is as follows:—

"In the year 1833 a woodcock with white feathers in the wings was observed in a cover on the manor of Monkleigh, near Torrington, in the county of Devon. The same bird, or one of exactly similar plumage, re-appeared in the same place during the four succeeding seasons, in which period it was so repeatedly shot at by different persons without effect, that it at last acquired among the country-people the name of 'the witch.' In the year 1837 however it was killed by John Piper of Monkleigh, while following the owner of the property which it frequented, the Rev. J. T. Pine Coffin of Portledge, who has now the stuffed specimen in his possession.

"The white feathers are the primary quills and bastard winglets of each wing, the remainder of the plumage being of the ordinary hue. These feathers are all of a pure white, and seem to be of a closer and stronger texture than usual, but no other peculiarity is observable. It is however worthy of notice, that the cover which formed its constant haunt, when not disturbed, is a piece of wood not exceeding fifty acres in extent; thus proving the disposition of the woodcock to return, not only to the same district but to the same spot which it has once frequented, and to which it is probably first directed by the parent bird, or by other companions older than itself."

"Barnstaple, 17th July, 1841."

A letter from Sir Robert Heron, Bart., was next read. It states that two Rheas in Sir Robert Heron's menagerie had laid thirteen eggs; but as they showed no inclination to set upon them, eight of them were placed under four turkeys. "When the young Rheas were hatched," observes Sir Robert Heron, "the turkeys appeared to think them monsters, and in every instance attacked them; but upon their being placed under the turkeys the ensuing night, they took proper care of them." But one, however, of the young Rheas survived, and this was allowed to range loose with the turkey. It employed its time in catching insects, which is remarkable, since the adult Rhea does not feed upon insects.

The eggs of the Rhea were hatched in five weeks, whilst the Emu sits nine weeks, and Sir Robert Heron supposes the difference of time required to hatch the eggs of these two species may perhaps arise from the difference in the thickness of the shell of their eggs, the shell of the Rhea being thinner than that of the Emu.

Mr. Gould exhibited four new species of Kangaroos from his collection, and pointed out their chief distinguishing characters. These four species Mr. Gould proposed to name *Osphranter Antilopinus*, *Osphranter* (?) *Isabellinus*, *Halmaturus agilis*, and *Lagorchestes conspicillatus*. The first of these Kangaroos is of large size, and remarkable for the great expanse of the nasal cavity, and consequent dilatation of the bones which inclose that cavity. The bony palate is destitute of the large posterior openings found in the skulls of the typical *Halmaturi*. The incisors are comparatively small; the foremost incisor on each side is rather broader than the second, and the posterior incisor is about equal in width to the other two taken together. On the outer surface of the first and second incisors may be perceived faint traces of longitudinal grooves, and the hindermost of these teeth has a distinct vertical fold situated rather in front of the middle of the tooth. The adult skull presents false molars $\frac{1-1}{1-1}$; true molars, $\frac{4-4}{4-4}$; and the skull of an aged individual has the false molars $\frac{1\cdot 0}{0\cdot 0}$; true molars, $\frac{3\cdot 3}{3\cdot 3}$.

The muffle is broad and naked; the muzzle is broad and rather short; the ears are moderate and rounded at the apex. The fore-limbs are comparatively long and stout, and the toes and claws are very strong. The hind-limbs are short and muscular; the middle toe of the hind-foot is very large, whilst the lateral toes are but little developed; the two small inner toes (which are united in one common integument as in other Kangaroos) terminate in a line with the small outer toe, or very nearly so. The under surface of the feet is very rough, being covered with small horny tubercles.

These characters, especially the great expansion of the muzzle and the comparatively small development of the lateral toes of the hind-feet, and increase in size of the central toe, Mr. Gould is of opinion should be regarded as generic, or subgeneric, rather than specific; he therefore proposed for the animal the new sectional title of *Osphranter*. The specific name *Antilopinus* was suggested by the peculiar texture of the fur, which resembles that of an Antelope. The principal characters are as follows:—

OSPHRANTER ANTILOPINUS. *Osphr. rhinario lato, nudo; rostro lato, amplificato, cavis nasalibus amplis; caudâ elongatâ, validâ, pilis brevibus adpressis indutâ; tarsis posticis mediocribus, digito intermedio permagno, digitis lateralibus parvulis, et inter se eâdem longitudine; vellere brevi, aliquanto rigido et adpresso (sicut in Antilope videtur); colore rufo, artubus pallidioribus; corpore subtùs, gulâ, aurium, artuumque partibus internis, nec non caudæ basi infrà, albis vel flavescenti-albis.*

Fœmina *vellere flavescente, apud dorsum fuscescente; capite supernè fusco, albido adsperso, occipite, et auribus externè fuliginoso-fuscis; genis, gulâ, artubus internis corporeque subtùs pallidè flavescentibus; caudæ basi infrà flavescenti-albâ.*

| | Masc. | | Fœm. | |
|---|---|---|---|---|
| | unc. | lin. | unc. | lin. |
| Longitudo ab apice rostri ad apicem caudæ. . | 87 | 0 | 66 | 0 |
| ——— *caudæ* .................... | 33 | 6 | 26 | 0 |
| ——— *tarsi digitorumque* ............ | 13 | 0 | 11 | 0 |
| ——— *antebrachii* et *pedis antici* ...... | 15 | 0 | 9 | 0 |
| ——— ab apice rostri ad basin auris .... | 7 | 9 | 5 | 9 |
| ——— *auris* ........................ | 4 | 3 | 3 | 6 |
| ——— tibiæ ...................... | 17 | 6 | 13 | 6 |

*Hab.* Port Essington, North coast of Australia.

Mr. Gould observed that the *Petrogale robusta* should also be referred to this section.

Of the second species Mr. Gould regretted he was not able to lay before the meeting a perfect specimen; the skin, however, which he exhibited, though imperfect, in his opinion exhibited characters not found in any species hitherto described: they are,

OSPHRANTER (?) ISABELLINUS. *Osphr. vellere aliquantò brevi, molli, splendidè fulvo; gulâ, corpore infrà, artubusque albidis, hic atque illic flavescente levitèr tinctis.*

Longitudo corporis circiter 36 unc.

The general colour of the skin is bright fulvous or sandy red; the fur is rather short and soft to the touch; the hairs are uniform in tint to the base: the throat and under parts of the body are white, faintly tinted with yellowish in parts. The fur on the belly is long and very soft: the white or whitish colouring of the under parts, and the uniform fulvous colouring of the upper parts and sides of the body, do not blend gradually. The colour of the tail is nearly the same as that of the body, but is rather paler, and is nearly uniform. The fore-feet and toes above are covered with brown hairs, but on the sides of the toes the hairs are yellowish. The size of the animal is probably about equal to that of the *Macropus Bennettii.*

This skin was procured at Barrow Island, on the north-west coast of Australia, by Capt. Stokes, of H.M.S. 'Beagle,' and transmitted by him to Mr. Gould, that its characters might be published.

The third species is thus named and characterized.

HALMATURUS AGILIS. *Hal. fulvus, suprà nigro adspersus, infrà*

*sordidè albus; aurium apicibus externis et margine antico nigris; strigâ fuscescente utrinque ab oculis usque ad nares productâ, et infra hanc lineâ albâ; clunibus lineâ albidâ notatis; caudâ longâ pilis brevibus albidis, ad basin suprà flavidis, ad apicem nigrescentibus, indutâ.*

| | unc. | lin. |
|---|---|---|
| Longitudo ab apice rostri ad apicem caudæ .. | 63 | 0 |
| ——— *caudæ* .......................... | 30 | 0 |
| ——— *tarsi digitorumque* .............. | 9 | 3 |
| ——— *antebrachii* et *pedis antici* ........ | 9 | 6 |
| ——— ab apice rostri ad basin auris .... | 5 | 6 |
| ——— *auris* .......................... | 2 | 9 |

The above are the principal characters of a male specimen procured at Port Essington: its fur is rather short, adpressed, and harsh to the touch: the general colour is sandy yellow, but the upper parts of the head and body are freely pencilled with blackish, the hairs being of this colour at the point. The chin, throat, and chest are nearly pure white, and the hairs on these parts are uniform to the base: on the belly the hairs are sandy yellow next the skin, but whitish at the point. The limbs are of a pale sandy yellow tint externally, and white on the inner side. On the fore-feet the hairs are also of a pale sandy yellow tint, but they are pencilled with blackish. The hind-feet are nearly white, but on the toes many of the hairs assume a rusty hue. The upper surface of the head is rather paler than the body; the lips are whitish, and a whitish mark extends backwards from the lips and terminates beneath the eye: running parallel with, and joining this mark, is another mark, which is of a dusky hue. The ears are of moderate size, somewhat pointed, white within, and of the same colour as the upper surface of the head externally, excepting at the apex, where they are rather broadly margined with black, and a narrow black line runs along the anterior edge. On each side of the rump is an oblique whitish line. The tail is rather sparingly clothed with short adpressed hairs, and these are nearly white, excepting on the upper surface at the base, where they are of the same hue as those on the back, and along the dorsal surface is a yellowish line: on the under surface the hairs of the tail are of a dirty white colour, and at the apex they are black.

The last species belongs to the division of the Kangaroos to which Mr. Gould has applied the name *Lagorchestes*, and is remarkable for the circle of bright rust-coloured hairs which surround the eyes, a character which suggested the specific name given.

LAGORCHESTES CONSPICILLATUS. *Lag. vellere ut in* Lepore timido; *artubus parvis; caudâ ferè quoad longitudinem cum corpore coæquali; capite corporeque suprà fuscescentibus et flavescenti-albo nigroque adspersis; corporis partibus inferioribus sordidè albis; lateribus ferrugineo-flavescentibus; caudâ pilis brevibus sordidè albis parcè indutâ; tarsis sordidè albis; auribus intùs pilis flavescenti-albis; oculis pilis ferrugineis circumdatis; vellere corporis superioris ad radicem nigro.*

| | unc. | lin. |
|---|---|---|
| Longitudo ab apice rostri ad apicem caudæ | 32 | 6 |
| ———— *caudæ* | 13 | 6 |
| ———— *tarsi digitorumque* | 5 | 3 |
| ———— *antebrachii* et *pedis antici* | 3 | 0 |
| ———— ab apice rostri ad basin auris | 3 | 3 |
| ———— *auris* | 1 | 3 |

This little animal was procured at Barrow Island, on the north-west coast of Australia; in size as well as in the colouring and texture of the fur it very nearly resembles the Common Hare (*Lepus timidus*, Auct.). From *Lagorchestes leporoïdes* it may be distinguished by the shortness of its ears and the want of a black patch at the base of the fore-leg. As in *L. leporoïdes*, it has the eyes encircled with reddish hairs; but these are of a more brilliant rusty-red colour than in that animal.

The fur is very long, dense, and rather soft to the touch; on the back it is of a black colour next the skin, yellowish white towards the apex, shaded into deeper yellow still nearer to the point, and black at the point. On the hinder part of the back the portion of each hair, which is yellow on the back, is replaced by white, and there is an oblique white mark on each side of the rump. The fur on the side of the body is deep grey next the skin, brownish yellow in the middle, and this is followed by black, then whitish, and at the point black. On the under part of the body the fur is ash-coloured next the skin, and white externally, excepting on the sides of the belly, where they are of a rusty yellow hue externally. The hair on the upper surface of the head is black, freely pencilled with yellowish white; a broad space round the eye is covered with bright rusty-red hairs, and this hue, though less bright, is extended backwards beneath the ear. The lips and chin are dirty white; the throat is white. The ears are very small and somewhat pointed; internally they are clothed with whitish hairs, and externally with dirty white hairs on the apical portion, but towards the base there is an admixture of black. The fore- and hind-legs and feet are pale, the hairs being dirty white at the point and brown next the skin. The tail is slender, and being but sparingly clothed with short dirty white bristly hairs, exhibits scales; on the under surface it is more densely clothed, and the hairs are longer and of a dirty yellowish hue.

This new species was transmitted to Mr. Gould for description by Capt. Wickham, of H.M.S. 'Beagle'

## ROYAL IRISH ACADEMY.

January 10, 1842.—Mr. Ball, referring to his paper read before the Academy in November 1839, relative to a *Loligo*, to which he gave the specific name of *Eblanæ*, exhibited the following Acetabuliferous Cephalopoda, with the view of showing the increased knowledge of species of the Irish seas, and of placing on record the very interesting discovery of two of the genus *Rossia*, which he had reason to believe had not before been noticed. He then exhibited specimens of

1. *Sepia officinalis*. Dublin bay.

2. *Sepia Rupellaria?* A dorsal plate, being one of three specimens found by G. Hyndman, Esq., at Magilligan. See Ferussac and D'Orbigny's Cephalopoda, plate 3 of Sepia.

3. *Loligo sagittata*. Leith. Obtained by W. Thompson, Esq., of Belfast.

4. *Loligo sagittata*, var.? This was in the former paper considered as a variety, but on comparison with the true *sagittata*, No. 3, it seems to be a distinct species. It was obtained by G. Allman, Esq., on the coast of Cork.

5. *Loligo subulata*, var.? Was obtained by John Montgomery, Esq. of Locust Lodge, on the coast of the county Down.

6. *Loligo subulata*, var. No. 2. Somewhat shorter than No. 5. Youghal, 1832.

7. *Loligo media*. Youghal, 1819.

8. *Loligo media*, var. It approaches the form of *sagittata* in the termination of its visceral sac.

9. *Loligo Eblanæ*. Of the former paper. Obtained by T. W. Warren, Esq., in 1836; and other specimens of greater beauty and larger size obtained in the bays of Belfast and Dublin by W. Thompson, Esq., and Mr. Ball. As it now appears that the animal possesses both eyelids and a lacrymal sinus, characters not ascribed to the genus *Loligo*, it may require to be placed in another genus.

10. *Eledone ventricosa*. Youghal, 1820, and Dublin. A very fine specimen was found by Mrs. Lyle at Kingstown.

11. *Octopus vulgaris*. Plymouth, 1841. Mr. Ball.

12. *Sepiola Rondeletii*. Youghal, 1819. Dublin, 1829. Mr. Ball.

13. *Rossia Owenii*. Was obtained in 1839 by Mr. Ball, from a fishwoman who had found it in a Dublin bay fishing-boat. It is remarkable for the great size and distinctness of its acetabula, which are placed on long peduncles, and may be compared to the pearls in a diadem: they are ranged in three rows, those of the centre row being not more than half the diameter of those on each side; on the first pair of arms the acetabula are more numerous, more equal in size, and smaller than on the others. The specific name has been given in honour of R. Owen Esq., the founder of the genus *Rossia*.

14. *Rossia Jacobii*. Was obtained from the same woman as the foregoing, in 1840, by A. Jacob, Esq., M.D., who kindly sent it to Mr. Ball. It is much larger, but differs considerably in its proportions from *Rossia Owenii*; its acetabula are smaller; its arms proportionably shorter; the membrane round the mouth forms a hexagonal figure from each angle, of which a ridge runs, which is decurrent in six cases; on the second, third, and fourth pair of arms, and in the seventh the ridge passes upon the web between the first pair of arms, where it bifurcates, and runs out on each side. Its specific name is given in honour of Dr. Jacob, from whom Mr. Ball has in many instances received kind and valuable aid in zoological pursuits. The fins

of both these species of *Rossiæ* are like in form and position to those of *Sepiola Rondeletii*.

15. *Spirula australis*. Shell found at Youghal, 1820.

*The following are the Measurements of the* Rossiæ *in inches* :—

| | Rossia Owenii. | Rossia Jacobii. |
|---|---|---|
| Length of body | 1·7 | 2·1 |
| Breadth over fins | 2·0 | 2·7 |
| Length of fin | 0·7 | 1·5 |
| Extreme breadth | 0·45 | 0·7 |
| Breadth between eyes | 0·9 | 1·2 |
| Extreme breadth of head | 1·1 | 1·4 |
| Length of head | 0·5 | 0·7 |
| Length of tentacula | 4·0 | 5·7 |
| Portion of tentacula occupied by acetabula | 0·9 | 1·5 |
| Length of first pair of arms, counting from top of head | 2·1 | 2·2 |
| Length of second pair of arms, counting from top of head | 2·4 | 2·3 |
| Length of third pair of arms, counting from top of head | 2·7 | 2·6 |
| Length of fourth pair of arms, counting from top of head | 2·3 | 2·4 |
| Depth of fin between first pair of arms | 0·2 | 0·4 |
| Depth of fin between first and second pair of arms | 0·3 | 0·5 |
| Depth of fin between second and third pair of arms | 0·42 | 0·6 |
| Depth of fin between third and fourth pair of arms | 0·4 | 0·8 |
| Depth of fin between fourth pair of arms | 0·04 | 0·03 |

## BOTANICAL SOCIETY OF EDINBURGH.

This Society held their seventh meeting for the season on the 12th instant, at the Botanic Garden, Professor Christison in the Chair.

The following communications were read :—

1. On *Fumaria parviflora*, as a native of England. By Mr. C. C. Babington, M.A., F.L.S., &c., Cambridge.—Mr. Babington, in reference to an opinion formerly expressed by him, that this species was a very doubtful native of England, not having then seen any specimens agreeing with the true characters of it, now states that he has obtained satisfactory proofs of its being a native, but that most botanists have been in the habit of calling *F. Vaillantii* by that name. He says, however, that the flowers of English specimens of *F. Vaillantii* are decidedly smaller than those of some which he possesses from Montpelier, and that in some white-flowered English specimens of the same plant he perceives traces of an apiculus; also, that in French specimens of *F. parviflora* the flowers are of the same size as those of *F. Vaillantii*; but the fruit has an apiculus. Mr. Babington then proceeds to give a minute description of the principal characters which distinguish this and other allied species of the genus, among which there has hitherto been much confusion.

2. On the occurrence of *Gelidium rostratum*, Harv., at Aberdeen. By Mr. George Dickie, Lecturer on Botany, Aberdeen.—This remarkable plant, which Mr. Turner was disposed to consider, though with some hesitation, as merely a variety of *Delesseria alata*, but which Dr. Arnott and Mrs. Griffiths refer to *Gelidium*, Mr. Dickie states to be abundant at Aberdeen, though it has not hitherto been

found *in situ.* It occurs on the large stems of *Laminaria digitata*, and appears to be an inhabitant of deep water, being only found cast up after storms. Mr. Dickie says, "After comparing numerous fresh specimens of *G. rostratum* and *D. alata,* I feel convinced that there is no essential difference in the structure and outward form of the fruit in these plants. In both the ternate granules are terminal and axillary, and the capsules occupy the same position. The seeds, however, differ in form, those of *D. alata* are mostly oval; in the other they are spherical."

3. On some anomalies in form in *Scolopendrium vulgare.* By Mr. Joseph Dickson.—The fronds exhibited by Mr. Dickson presented every possible variety of shape, from lanceolate to reniform, and from entire to lobed or rather digitate. The more usual form is certainly entire and *oblongo-lanceolate,* and it is difficult to account for the freaks of form which not unfrequently occur in this species of fern.

After these papers were read, Professor Graham exhibited some very beautiful and interesting specimens of exotics from his own green-houses, and the Society then accompanied him in a walk through the garden, which presented a most gratifying appearance.

### GEOLOGICAL SOCIETY.—MR. LONSDALE.

We regret to hear that the Geological Society of London will shortly be deprived of the services of their invaluable Curator and Librarian, Mr. Lonsdale. Intimately connected as we have been for many years with this Society, we can well appreciate the sorrow which this announcement has caused to all the members,—who thoroughly estimate the high qualities of this eminent person, and entertain the deepest gratitude for the devotion and unrivalled skill with which he has, during the last thirteen years, arranged their collections and conducted the publication of their volumes. Mr. Lonsdale's retirement, we are grieved to say, is occasioned solely by the state of his health: and to this notice of the loss which the Geological Society is very soon to suffer, we shall only add our hope, that a naturalist and man of letters may be found competent to succeed him as editor of the Geological Transactions*.

## MISCELLANEOUS.

### STERNA ARCTICA.

A FLOCK of the *Sterna arctica* made its appearance on the 8th inst. on the river Avon in this county. Several specimens were shot, three of which I have had an opportunity of examining, and it is remarkable that all these were females. Their ovaries being very slightly developed, it appears that their breeding time was still distant, and we may therefore conclude that these birds were on their

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* Upon this subject we believe that application may be made to the President and Council of the Society at Somerset House.—[EDIT.]